UCSF
Newsbreak

News for the UCSF Campus Community

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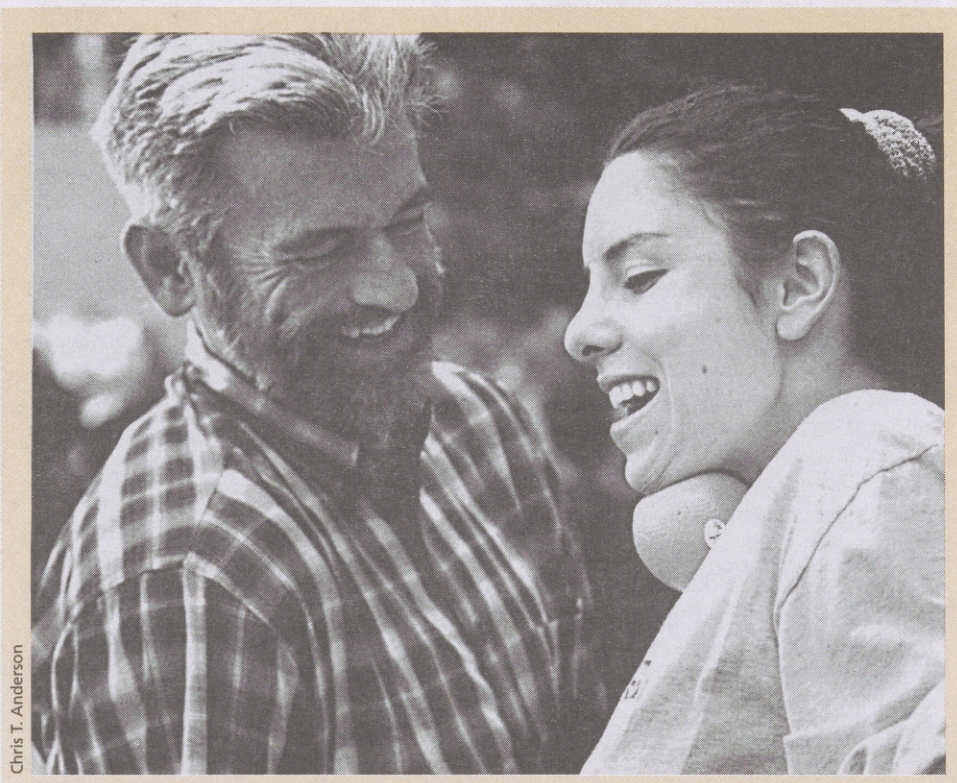
INSIDE

3 Professor elaborates on Darwin's theories of emotion

4-5 UCSF launches addiction center with symposium

6 Study that shows how sperm develop may further understanding of infertility



Chris T. Anderson

Orange you glad it's spring?

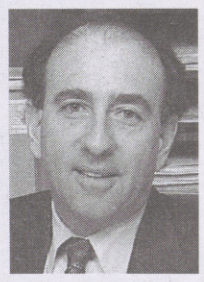
Michael Lemont, director of students affairs in the School of Pharmacy, laughs with teammate Marsella Altamirano, a third-year student, who manages to hold onto an orange during one of the events in the "Battle of the Schools" competition held last Thursday in Saunders Court. For the story and more photos, see page 7.

Levy finds serious shortcomings with current HIV cocktail

By JENNIFER O'BRIEN

Enthusiasm about the "cocktail" of drugs so successfully suppressing the advance of HIV in infected people has been shadowed recently by warnings from a leading HIV researcher at UCSF that the drugs don't address the ultimate concern.

That concern, said UCSF's Jay Levy, one of the discoverers of HIV and a leader in understanding its mechanisms, is the need to eradicate HIV from infected cells, so that these protected reservoirs of the virus will not be able to allow the emergence of drug-resistant strains. Current therapies simply prevent the spread of HIV to new cells.



Levy

To address the larger issue, said Levy, research should focus on what appears to be a natural immunity to the virus in some people. These infected individuals remain healthy for more than 15 years without any treatment. Being able to induce their type of immune response could ultimately lead to the development of a synthetic vaccine that could prevent the virus infection, Levy said.

At the Federation of the American Society of Experimental Biology (FASEB) meeting in San Francisco, Levy's colleagues Sharon Stranford and Edward Barker, both postdoctoral fellows in Levy's laboratory, presented their latest findings not only on the molecular basis of this apparent natural immune response, but on a molecular mechanism that enhances it.

"This line of research holds some promise," says Levy, UCSF professor of medicine and director of the Tumor and AIDS Virus Research Laboratory. "I believe the present approach to controlling HIV is doomed to fail. There is no restoration of the immune system in the treated people and the virus will eventually become resistant to the drugs."

Already, Levy points out, several people on drug treatment have resumed production of high levels of drug-resistant virus.

"Unless anti-AIDS treatments also attack the infected cells, as could be initiated by a vaccine or immune therapies," he says, "we will see the return of a large number of AIDS cases and the transmission of drug-resistant viral strains."

In one study presented at FASEB, Levy and colleagues reported that the reason at least 80 people they studied did not become infected with HIV despite hundreds of exposures through sexual contact or IV drug sharing was because they had the unique immunological ability to marshal the response of CD8+ lymphocytes, a specialized group of infection-fighting white blood cells. (This finding, in research led by Stranford, in Levy's laboratory, was initially reported last month at the 10th National AIDS Update Conference in San Francisco.)

In laboratory studies, Stranford showed that, as in the general population, the CD4+ lymphocytes of these people were susceptible to HIV infection. It was only in the presence of the CD8+ cells that viral replication was stopped. The CD8+ cells of non-HIV exposed individuals studied in the lab did not mount this response.

"We think this immunity results from exposure to low amounts of virus, which is enough to get the cellular immune antiviral response going," says Levy. "Each subsequent exposure then acts as a kind of booster." The researchers do not know why the CD8+ cell antiviral response occurs in some people and not in others, Levy adds.

In the second study from the Levy laboratory presented at FASEB, Barker identified a molecular link that is critical to

(See **Levy** on page 2)

Nation's top specialists to give breast cancer update

By JEFFREY NORRIS

Several of the nation's most highly esteemed breast cancer specialists will discuss the latest discoveries related to breast cancer research, diagnosis and treatment at a day-long symposium at UCSF, Thursday, April 30, from 9 a.m. to 5:15 p.m., at Cole Hall.

Researchers will present up-to-date results regarding new breast cancer diagnostic techniques; the genetics of breast cancer and what it means for prevention, diagnosis and treatment; and changing trends in breast cancer incidence and mortality, including the role of diet, hormones and environment.

In addition, researchers and patient advocates will describe the increasingly important role that patient advocates are playing in developing research and treatment programs and in improving treatment outcomes for cancer patients.

The symposium is sponsored by the UCSF Cancer Center, directed by Frank McCormick, the David A. Wood Professor of Tumor Biology and Cancer Research. The goal of the UCSF Cancer Center is to become the first NCI-designated comprehensive cancer center in Northern California. UCSF expects to apply for the designation this year.

Speakers at the UCSF Cancer Center's day-long symposium include:

- Virginia Ernster, professor of epidemiology and biostatistics at UCSF, will provide an overview on the latest demographic trends in breast cancer incidence and mortality. Ernster also will discuss risk factors for breast cancer, including lifestyle, hormonal, and environmental factors; possible preventive strategies; and the pros and cons of mammography screening.

Ernster, who along with her colleagues has described an "epidemic of diagnosis" of a type of breast cancer called ductal carcinoma in situ, leads a large National Cancer Institute (NCI)-funded project to establish a computerized population-based mammography registry for San Francisco that will be linked to other registries and used to develop a better understanding of mammography practices and outcomes.

- Laura Esserman, director of the Breast Care Center at UCSF and assistant professor of surgery, will discuss new applications for magnetic resonance imaging (MRI) in the clinic and in research. Esserman's clinical research team has found that MRI can provide valuable information that breast cancer patients and their doctors can use to make decisions about surgery or chemotherapy.

With more women choosing less invasive surgery or using chemotherapy to shrink tumors prior to surgery, it becomes increasingly important to define the boundaries of tumor tissue adequately, so that the tumor can be removed while healthy breast tissue is preserved.

Esserman and colleagues have determined that MRI can be used to more precisely define the boundaries of already diagnosed breast tumors. This information can be used to minimize the amount of healthy breast tissue destroyed during surgery and can reduce the incidence of repeated surgery to remove previously missed tumor cells.

- Joe Gray, director of the Breast Oncology Program at UCSF, will discuss the genetic characteristics of breast cancer that may contribute to disease progression and response to therapy. He will describe new, highly efficient procedures developed at UCSF for discovery and classification of genetic abnormalities and illustrate their use for analysis of breast cancer. These studies clearly show that the genetic characteristics of breast cancers are highly variable, even for tumors that appear clinically similar. Application of the new analysis procedures promises to allow classification of tumors into groups that progress and respond to therapy in the same way.

Gray also will discuss how efficient genome-analysis procedures coupled with information from the human genome program have increased the speed with which genes involved in breast cancer can be discovered and studied. Details of genes discovered using this approach will be presented.

- David Livingston, the Emil Frei Professor of Genetics and Medicine at Harvard Medical School and the Dana-Farber Cancer Institute, will describe the state-of-the-art in understanding how breast cancer genes actually contribute to breast cancer at the level of an individual cancer cell.

The breast cancer gene BRCA1 was discovered in 1994, and a second breast cancer gene, BRCA2, was discovered in 1995. However, until Livingston and colleagues published their findings in the Jan. 24, 1997 issue of Cell, researchers did not know how either BRCA gene — when abnormal — could contribute to cancer. Livingston's research suggested that BRCA1 normally helps maintain and repair DNA, in effect suppressing the accumulation of mutations that is essential to tumor development.

- Albert G. Mulley, associate professor of medicine and health policy at Harvard Medical School, chief of the General Internal Medicine Division and director of the Medical Practices Evaluation Center at Massachusetts General Hospital, and Deborah E. Collyar, president of the Patient Advocacy In

(See **Breast cancer** on page 8)

UCSF offers vacation leave sharing

By LISA CISNEROS

In the past, UCSF employees could only empathize with co-workers who exhausted all their University-paid sources of income while away from work because they or their family members were seriously ill.

Today, they can do something about it.

Effective last week, an employee can donate their vacation time to a colleague who depletes his or her vacation and sick leave and who is not receiving workers' compensation payments or disability benefits.

UCSF's Voluntary Catastrophic Leave Sharing Program gives regular status career employees and non-faculty academic personnel who accrue vacation the choice to donate up to 40 hours of that vacation time to another regular status career or non-faculty academic employee who exhausts paid leave due to their own serious illness or in caring for a seriously ill family member or member of their household.

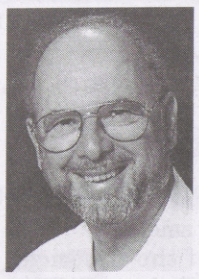
"This is an employee-driven program," explains Elizabeth Baker, senior analyst in the labor and employee relations division of the human resources department. "The employee has to request the leave."

Rod Kempton, a manager in development and training in the human re-

(See **Leave** on page 7)

Horowitz pens book on personality problems

Mardi Horowitz, professor of psychiatry at UCSF, has written a new book called *Cognitive Psychodynamics: From Conflict to Character*, which provides an understanding of the key issues found in stress and personality problems.


Horowitz

The culmination of his many years of clinical observation and research at UCSF, the book contains theoretical explanations on how the mind works. It shows how growth in character provides the courage to meet new challenges, Horowitz says.

Cognitive Psychodynamics was written for training psychiatrists, psychologists and cognitive scientists interested in consciousness, and for other mental health professionals, especially those who emphasize psychotherapy in their practice. It provides theoretical tools that lead to individualized case formulations — which are ways for understanding how symptoms and traits are formed.

"This book focuses on important human involvements and meanings; it preserves a conflicting forces approach and gives attention to unconscious mental processes in a language accessible to all."

UC police promote two to sergeant

Two UCSF police officers, Holly Choy and Malcolm Anderson, were promoted April 10 to the rank of Sergeant of Police. Both will be assigned as Patrol Watch Commanders in the department's operations division.

Anderson and Choy

Officer Choy began her career with the police department in 1983 as the first supervisor in the personal safety officer program. In 1985, she completed one of the state's police academies, after which she became a UCSF police officer.

Choy has been given many special assignments, which include field training officer, manager of personal safety officers at Laurel Heights, coordinator of the police explorer troop, and acting patrol watch commander. She was also assigned to the investigations section as a detective before returning to the patrol section this January.

Officer Anderson was originally hired in 1986 as a police dispatcher. He graduated from one of the state's police academies as a police officer a year later. Since becoming a police officer he has performed duties of a field training officer, firearms range master, investigations section detective, acting watch commander, and now serves as the department's equipment officer. During his tenure with the police department, Anderson also obtained a law degree from Golden Gate University. He is a member of the California and Washington, DC Bar Associations.

Koda-Kimble to serve on pharmacy education board

Mary Anne Koda-Kimble, professor and chair of clinical pharmacy, was appointed to a six-year term on the American Council on Pharmaceutical Education (ACPE) board of directors.

Koda-Kimble

Committed to education and scholarship for improving drug therapy, the ACPE is the nationally recognized accrediting body for the professional degree programs of the nation's 80 colleges and schools of pharmacy.

Koda-Kimble's appointment will begin in July.

She joins John W. Mauger of the University of Utah and Hewitt W. Matthews of Mercer University as representatives of pharmaceutical education to ACPE.

Koda-Kimble received her doctor of pharmacy degree from UCSF and has provided leadership to the faculty and administration of her alma mater for more than two decades. A nationally recognized leader in both pharmaceutical education and pharmacy practice, Koda-Kimble was a member of AACP's Commission to Implement Change in Pharmaceutical Education from 1989 to 1993 and served as president of the association in 1995-96. Under her leadership, the association implemented major programmatic activities for member schools to enhance their ability to facilitate change in professional curricula consistent with the dynamic changes occurring in health care.

Koda-Kimble's publications include six editions of the internationally renowned textbook Applied Therapeutics Clinical Use of Drugs. She is the author of 25 book chapters and has presented more than 150 times to national and international audiences in pharmacy and health care. Her current professional interests include pedagogical change and the relationship of the changing health care system to needed changes in health professions education.

Levy (from page 1)

enhancing this cell-mediated antiviral response. He and colleagues determined that when CD8+ cells were exposed to macrophages expressing a CD86 molecule on their surface, their antiviral action was amplified. Macrophages are another type of immune-system cell and play a role in increasing CD8+ cell function.

While this study was the first to show that macrophages are involved in this CD8+ and HIV response, the observation was not unexpected, as macrophages are known to be involved in cellular immune responses. But researchers had previously suspected that the macrophages stimulate CD8+ cells through the CD80 molecule, rather than the CD86 molecule.

"We've shown that the molecules on the surface of the macrophages play an important role in enhancing this response," says Barker, "and that the CD86 molecule is a critical factor."

The researchers demonstrated the role of the CD86 molecule through several procedures conducted in the laboratory: When they blocked the interaction of the CD28 molecule on CD8+ cells with the CD86 molecule found on macrophages, the macrophages' enhancing effects were abrogated. When they exposed macrophages to anti-CD86 antibodies, the CD8+ cells were not stimulated.

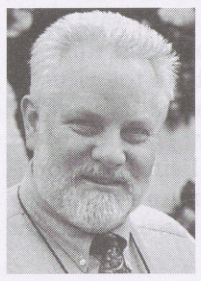
In contrast, anti-CD80 blocking antibodies had little effect on the ability of macrophages to enhance CD8+ cell antiviral response.

Finally, the researchers were able to reverse the decreased antiviral response that followed treatment of macrophages with anti-CD86 neutralizing antibodies by exposing the CD8+ cells to anti-CD28 antibodies, which are able to carry out the same function as the CD86 molecule.

"These studies indicate that engagement of the CD28 molecule on CD8+ cells with the CD86 molecule on macrophages is critical for optimal suppression of HIV replication by the CD8+ cells," says Levy.

"Further studies are needed to determine if the reduced CD8+ cell antiviral response associated with progression to AIDS can be due to a decreased CD86 expression on antigen presenting cells, such as macrophages. If it is, this information could provide a direction for developing a drug to prevent it."

Honors & Awards


Attkisson

Clifford Attkisson, dean of graduate studies and associate vice chancellor for student academic affairs: Appointed to Fellow status in the American Psychological Society in recognition of his sustained outstanding contribution to the science of psychology.

Jaclyne Boyden, vice dean for administration & finance, School of Medicine: Elected chairperson-elect of the Group on Business Affairs of the Association of American Medical Colleges.

Claire Brindis, associate adjunct professor, division of adolescent medicine, department of pediatrics and Institute for Health Policy Studies: Selected for visiting professorship for research from the Society of Adolescent Medicine at its annual meeting March 7. Brindis' research and analyses focus on teen pregnancy and pregnancy prevention, reproductive health services, adolescent health and school-based integrated health and social services. The purpose of the professorship is to provide an educational experience in adolescent research for a deserving group of health care providers who might not otherwise have an opportunity to benefit from a professor's expertise.

Robert K. Jackler, professor of otolaryngology and neurological surgery: Co-produced a CD-ROM entitled "Temporal Bone Dissector: The Interactive Otology Reference," which was awarded by the American Association of Publishers in the category of best electronic product in math/science. The CD-ROM is an interactive surgical emulator that includes abundant original artwork and 3D animations. Modules covering temporal bone radiology (multiplanar CT and MRI) and video clips of actual surgical procedures are included.

Marion A. Koerper, clinical professor of pediatrics and director, UCSF Hemophilia Comprehensive Care Center: Appointed to a four-year term on the Blood Products Advisory Committee of the Food and Drug Administration. The committee makes recommendations to the FDA on matters regarding the safety of the nation's blood supply.

File photo 1991
Marion Koerper

A.J. Malerstein, associate clinical professor, department of psychiatry: Appointed visiting scholar in the Institute of Human Development at UC Berkeley beginning July 1, 1998. He will continue his research on the effects of the early family setting on social cognition and motivation in adolescence. The research is an effort to test empirically concepts advanced in his book, "A Piagetian Model of Character and Structure."

John Urquhart, adjunct professor of biopharmaceutical sciences: A visiting professor of pharmacoepidemiology at Masastricht University, The Netherlands, Urquhart will be honored as a Fellow of the Royal College of Physicians in Edinburgh. The ceremony will take place in Edinburgh on June 3, 1998.

School of Dentistry, Clinics & Administration unit: The following employees were recognized for outstanding performance records in the previous year at the Staff In-service Program held March 26 and March 27. Award winners are:

Monika Avdeef
Gina Dossey
Jennifer Gonzalez
Noly Gregara
Charlie Lintini
Belgica Martinez
Maribeth Mastrianni
Cheri Murrell
Barbara Paganini
Cory Price
Rachel Simmons

Private Support

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$7,500,000 or more
The Pew Charitable Trusts

$500,000 - $999,999
California Healthcare Foundation

$250,000 - $499,999
The Robert Wood Johnson Foundation

$100,000 - $249,999
Sandra Lloyd

$25,000 - $99,999
Arthritis Foundation
Ranjit S. Bhonsle
Mr. and Mrs. John Bowes
Glaxo Group Research Limited
Max Kade Foundation
The Lissak Foundation
Procter & Gamble Distributing Company
The San Francisco Foundation
Bernard S. Sorkin, '53

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UCSF seeks patients to test melanoma vaccine

UCSF has been named part of an international program to begin the final testing of a vaccine used to treat the deadly skin cancer, melanoma.

As part of the program, physicians from UCSF will join researchers from the John Wayne Cancer Institute at Saint John's Health Center in Santa Monica, California, and researchers from 31 international locations, including Canada, Great Britain, Australia, the Netherlands, Italy, France and Israel.

The study is sponsored by a $26.8 million grant awarded by the National Cancer Institute (NCI) and is one of the largest grants funded by the NCI in the last 12 months for a clinical cancer study.

UCSF will begin the third phase of testing of the unique vaccine in patients with Stage IV melanoma that has advanced to other parts of the body. The study will determine how well the vaccine prolongs survival in patients with relapsed melanoma.

"This is a very important study because it is examining a biological and minimally toxic treatment that may potentially prevent melanoma from recurring in people who have already experienced at least one relapse of the cancer," says Mohammed Kashani-Sabet, UCSF clinical instructor of dermatology and co-director of the UCSF Melanoma Center.

The vaccine works by stimulating the body's immune system to fight the cancer. Through extensive research, scientists have learned that only three types of cancer cells arouse the immune system's strongest and broadest response. Radiation is used to weaken live cells, which are harvested from other patients and grown in the laboratory and combined with a special bacteria to form the vaccine. The vaccine is then injected into the melanoma patient.

The five-year trial will compare the outcome of patients who receive the vaccine with patients who only receive the special bacteria that is used to make the vaccine. This is the final step toward Food and Drug Administration approval to make the vaccine widely available.

In patients treated so far, a strong immune response has been triggered in 90 percent of the cases. To date, more than 1,500 people have received the vaccine treatment. Earlier trials found the vaccine to be a potentially effective treatment for metastatic melanoma, which is skin cancer after it has spread to other areas of the body.

Researchers believe that if the melanoma vaccine is proven effective in this final phase of testing, it may become a model for treating all solid cancers. Because it contains 13 other antigens (cell proteins that alert the body's disease-fighting white blood cells) shared by cancers of the breast, colon, lung and prostate, it may be a treatment for these cancers as well, researchers say.

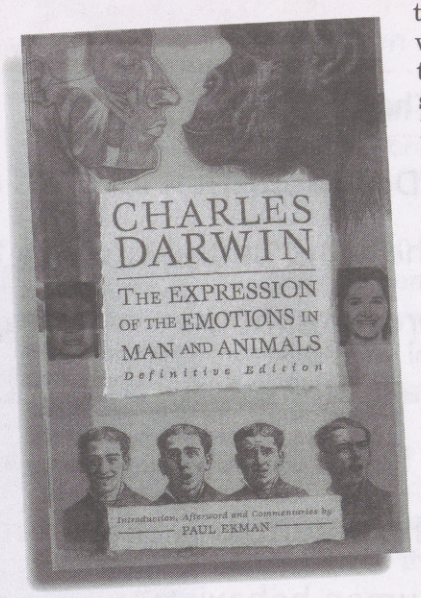
UCSF is looking for patients to participate in the clinical trials of the melanoma vaccine. Individuals must have been diagnosed with melanoma and experienced a relapse of the cancer. Those interested in learning more about the program or participating in the study should contact the UCSF Melanoma Center at 885-7546.

Ekman expounds on Darwin's theories that emotions are universal

By ABBY SINNOTT

Charles Darwin explained his theories of the universality of emotions, evolution and the continuity of species in his book, *The Expression of the Emotions in Man and Animals,* published in 1872.

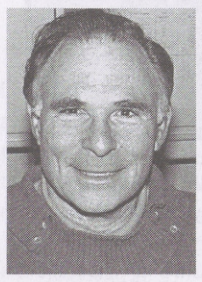
After an initial surge as a bestseller, sales of the book declined dramatically and the book was eventually forgotten.


CHARLES DARWIN
THE EXPRESSION OF THE EMOTIONS IN MAN AND ANIMALS
Definitive Edition
Introduction, Afterword and Commentaries by
PAUL EKMAN

Today, 126 years later, UCSF professor of psychology Paul Ekman has renewed interest in Darwin's theories by writing an introduction, afterword and commentaries in *The Expression of the Emotions in Man and Animals: Definitive Edition* (Oxford University Press, $30). Ekman's commentaries elaborate, support and occasionally challenge Darwin's insights.

"Darwin's book is still the most comprehensive text available that explains the nature of emotions," says Ekman. "It is important to better understand and recognize expressions of human emotions because unlike thoughts, which are private, expressions disclose what we are feeling."

One of the reasons the book was ignored and why it remains important today, Ekman says, is "Darwin's evidence that expressions are innate, that these signs of our emotions are the product of our evolution and are therefore part of our biology."

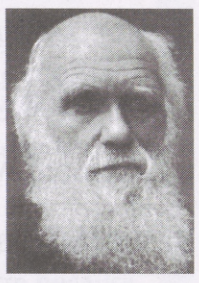

Ekman

Beliefs that neither expressions nor emotions are unique to human beings, but that humans share them with animals were completely incompatible with the reigning dogmas at the end of the 19th century, Ekman explains.

A leading researcher on facial expressions and emotions himself, Ekman originally intended to disprove Darwin's theory that emotions are universal. During the 1960s, Ekman traveled to the last existing stone age culture in Papua New Guinea to study people's expressions.

"I wanted to finally settle the argument about whether emotions are culturally specific or universal, and I found that Darwin was right," says Ekman. "There are at least seven emotions that have the same signals for all humans, regardless of their heritage, nationality or language."

He notes that this finding supports Darwin's argument on the unity of mankind and challenges racist theories that claim that one group of humans is superior to another because they descended from a more advanced species. Although Darwin's work did denounce racism, Ekman adds that, ironically, another reason the book was neglected shortly after publication was because people believed it to be racist. In reality, it is the exact opposite.


Darwin

Ekman returned to Darwin's original notes to produce a corrected authoritative text, illustrated by the original drawings and photographs Darwin intended to include, but which were too expensive to reprint at the time. When it was first published, *The Expression* was the first scientific book in English to contain photographic reproductions.

According to Ekman, a Darwinian renaissance has occurred in both the lay and scientific communities in the last five years. People no longer believe that one's environment, or nurturing, is the sole determiner of human behavior.

"This is a much more hospitable time for Darwin," Ekman says. "People have now accepted that nature and nurture both play a role in our behavioral development."

Controlling HIV in US and Third World

After meeting with colleagues to discuss how to control the AIDS epidemic in Third World countries, Tom Coates, director of the UCSF AIDS Research Institute, reacted to discouraging news about future prevention efforts in the US.

Coates

Health and Human Services Secretary Donna Shalala announced Monday that the Clinton Administration will not lift a 10-year ban on using federal funds for needle exchange programs despite scientific evidence showing that such programs reduce the spread of HIV and do not encourage illegal drug use.

Accusing Shalala of "public health malpractice," Coates was among leaders in the fight against AIDS to denounce the unexpected decision.

Although Shalala said the use of federal funds continues to be restricted for such programs, she acknowledged their efficacy.

"A meticulous scientific review has now proven that needle exchange programs can reduce the transmission of HIV and save lives without losing ground in the battle against illegal drugs," she said. "It offers communities that decide to pursue needle exchange programs yet another weapon in their fight against AIDS."

National Institutes of Health Director Harold Varmus, a Nobel laureate from UCSF, and among those who advised Shalala, weighed in on the issue as well.

"An exhaustive review of the science in this area indicates that needle exchange programs can be an effective component of the global effort to end the epidemic of HIV disease," Varmus said.

The NIH has funded much of the research into the effectiveness of needle exchange programs and their impact on drug use. "Recent findings have strengthened the scientific evidence that needle exchange programs do not encourage the use of illegal drugs," he said.

Specifically, Varmus cited:

- An NIH report published last March that concluded that needle exchange programs "show a reduction in risk behaviors as high as 80 percent in injecting drug users, with estimates of a 30 percent or greater reduction of HIV." A preponderance of evidence shows either a decrease in injection drug use among participants or no changes in their current levels of drug use, he added.
- A study last October of needle exchange programs in Baltimore, Md., indicated that needle exchange programs that are closely linked to or integrated with drug treatment programs have high levels of retention in drug treatment.

The Clinton Administration decided that local communities which choose to implement their own needle exchange programs should finance them and share the results so that communities can develop the most successful programs to halt HIV without encouraging illegal drug use.

HIV in the Third World

Meanwhile, the primary focus of a four-day program — sponsored by UCSF's AIDS Research Institute and the Fogarty International Center at the National Institutes of Health — was on prevention of HIV by sexual transmission and transmission by injection drug use with psychosocial and biological interventions that can be carried out at the individual, community, or societal level.

A panel of 200 international AIDS experts from 38 countries agreed that practical and affordable prevention programs must be implemented immediately to save the lives of millions of people in developing countries now ravaged by the disease.

Prevention should be a major world priority "to save the next generation and the generation after that," said Coates. It's unrealistic to expect that an affordable and effective vaccine will come in time for these generations, he said. Although new drug treatments are extending lives of HIV-infected people in industrialized countries, they are not affordable to those in the poorer nations.

As a result, HIV continues to spread at an alarming rate. Since the beginning of the pandemic, HIV has disproportionately devastated the developing world. In 1996, 93 percent of the infections were in these regions. The industrialized world accounted for only 2 percent or 55,000 new HIV infections of the global total.

> **"We plan to go beyond the public health perspective and to develop workable interventions that can be carried out."**
>
> MARGARET CHESNEY
> *— co-director of the UCSF Center*

Specifically, the largest numbers of individuals ever infected with HIV were in sub-Saharan Africa, totaling 19 million (68 percent of the global total) and in South and Southeast Asia, totaling 5 million (18 percent of the global total).

The number of HIV-infected people in South and Southeast Asia alone is now more than twice the total number of infected people in the entire industrialized world.

At a news conference Monday, the panel announced the prevention and research priorities, which included: Preventing HIV among young people, especially women; improving the status of women; changing policy by decreasing stigma associated with the disease and increasing access to health services; reducing perinatal transmission; targeting HIV-positive people in prevention efforts; testing blood supplies; and conducting studies that could yield cost-effective prevention strategies.

In every developing country, the needs are clear, the experts agreed. They include supplies of drugs, such as AZT, that prevent transmission of HIV from pregnant women to their babies, centers for HIV testing and counseling, labs to test a nation's blood supplies to prevent spread by blood transfusions, and marketing of condoms.

These efforts, however, are not affordable in Third World nations, panel members agreed, and taxes on wealthy individuals and multinational corporations may be necessary.

"Our goal is to make something happen. We plan to go beyond the public health perspective and to develop workable interventions that can be carried out," said Margaret Chesney, conference co-chair and co-director of the UCSF Center for AIDS Prevention Studies.

The outcome of the workshop will be made available to educational institutions, health authorities, foundations, and non-governmental organizations in both developed and developing countries. The findings also will be placed on HIV Insite (http://hivinsite.ucsf.edu).

Fighting a

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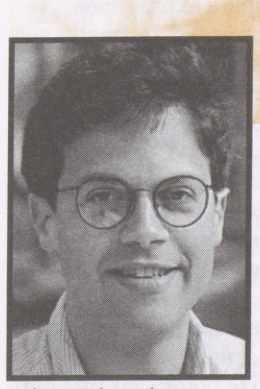
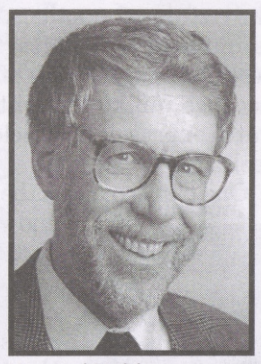


Robert Edwards, professor,neurology and physiology

The researchers

"Drug addiction involves coopting the same neural circuitry that normally provides motivation for eating and sex. I am interested in drug abuse because, in addition to its importance as a social and medical problem, it has the potential to illuminate profound aspects of vital human behavior."

"I treat patients with chronic pain. Unfortunately, some of the most effective pain-relieving drugs I use also are addicting. My goal is to find a great drug that is selective for pain relief, potent and not addicting."



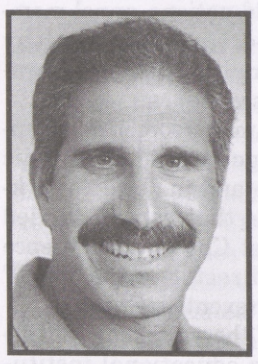
Howard Fields, professor, neurology and physiology

Ulrike Heberlein, assistant professor, neurology

"Drug addiction, like many maladaptive behavioral traits, likely has genetic contributions. Determining the genetic contribution to addiction will allow us to develop better treatments and to identify susceptible individuals before they become addicted. "

"I have a longstanding interest in the neurologic complications of complex medical conditions such as substance abuse, particularly when they affect urban indigent patients."

Cheryl Jay, assistant clinical professor, neurology



Robert Malenka, professor, psychiatry and physiology and director, Center for the Neurobiology of Addiction

"I am convinced that the solution to the downward spiral of addiction will only come about from a detailed understanding of the cellular and molecular changes that occur in specific neural circuits."

UCSF to inaugurate addiction research center

By RUTHANN RICHTER

On Thursday and Friday, May 7 and 8, UCSF will inaugurate its new Center for the Neurobiology of Addiction, one of the nation's first research enterprises strictly devoted to understanding the biological basis of addiction from an interdisciplinary approach.

Leading scientists from across the country, including the director of the National Institute on Drug Abuse (NIDA) of the National Institutes of Health, will mark the opening of the center in a two-day scientific symposium on addiction. The symposium is free and open to the public.

The center will bring together 20 core faculty — leading cellular and molecular neuroscientists at UCSF, including those from the Ernest Gallo Research Center and Clinic at San Francisco General Hospital, to focus their collaborative energies on the study of addiction.

Addiction is considered the nation's leading health problem, with an economic cost of more than $260 billion annually, including medical and crime-related costs, according to NIDA data.

"The goal of the center is not only to produce new knowledge and take innovative approaches to addiction but to call attention to the fact that addiction is a solvable medical disorder that has not been attacked from a research perspective in the way many other medical problems have," said Robert Malenka, UCSF professor of psychiatry and physiology and the center director.

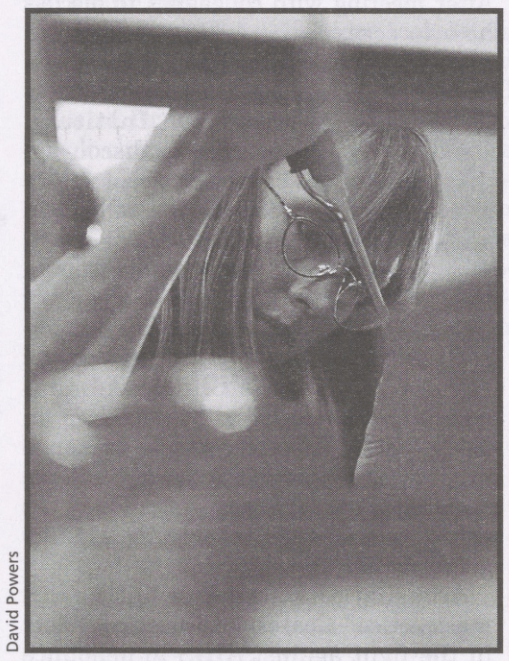
Scientific advances in the last two decades have shown addiction, rather than being the result of a character flaw or weakness of will, is a chronic, but potentially treatable, brain disease that results from exposure of the brain to harmful drugs in susceptible individuals, Malenka said.

"One of the problems with addiction treatment and research has been that there has been a stigma attached to addiction, with addicts viewed as weak or immoral people," he said. "In fact, that is not the case. The biomedical research and medical communities now recognize that addiction should be thought of as a brain disorder, just as Alzheimer's disease or epilepsy are brain disorders."

Through use of advanced imaging tools, scientists have shown that addiction changes the brain in fundamental ways, he said. The goal of the center is to understand how those changes occur at the molecular and cellular level and ultimately find ways to help reverse those effects.

The center, essentially an institute without walls, is expected to serve as a catalyst for new discoveries about the biology of addiction by supporting individual research projects and sponsoring regular meetings and symposia where scientists from diverse backgrounds and perspectives can share insights and plot new initiatives.

The center scientists, some of whom already have made major contributions to the field, will focus their research on three key areas: how addicting drugs act on receptors and other molecules in the brain; how these drugs disrupt normal communication between nerve cells in the brain; and how drugs affect the



David Powers

The facts

3 million Number of Americans who regularly use cocaine or heroin

75 Percentage of federal prison inmates who have committed a drug offense or whose substance abuse contributed to their crime

2 Number of drug-related arrests made every minute

$77.6 billion Total cost of substance abuse to federal entitlement programs, from Medicare to unemployment compensation

17,000 Number of traffic fatalities in 1995 that were alcohol-related

San Francisco City with the highest rate of heroin-related hospital admissions in California

17,100 Number of intravenous drug users in San Francisco

116 Number of heroin deaths in San Francisco in 1995

65.2 million Number of Americans who have used marijuana at least once in their lives

2,400,000 Number of Americans who each year try cigarettes for the first time

71 Percentage of illegal drug users who are employed

addiction

Researchers unite to combat common brain disorder

complex tapestry of neural circuits that influence thought, emotion and behavior, Malenka said.

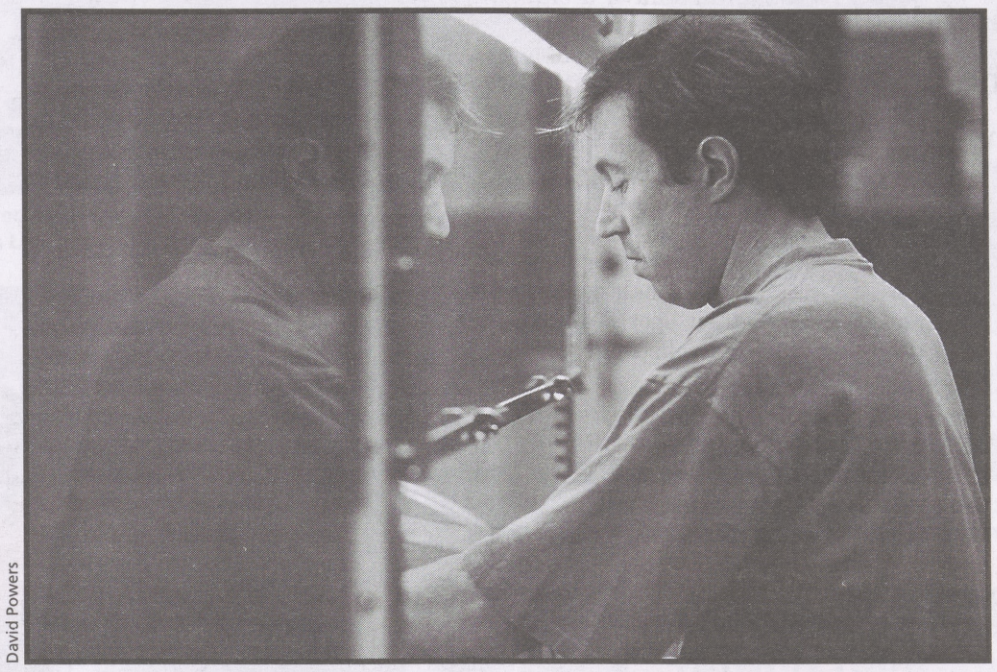
While the focus will be on basic research, the hope is that the center will contribute to the development of new therapeutic approaches for addiction, which may be treated much like schizophrenia, depression or other brain disorders, he said.

"This center will take advantage of our new understanding of addiction as a brain disease to focus the power of modern biology on this terrible problem," said neuroscientist Zach Hall, UCSF vice chancellor for research and former director of the National Institute of Neurological Disorders and Stroke. "As director of the Neurology Institute at the NIH, I worked closely with those at NIDA to develop a program of brain research on addiction. I am delighted to find upon my return that UCSF is engaged in a parallel effort."

The center was initiated by UCSF Chancellor Haile Debas, who recognized the value of bringing together key UCSF faculty from various disciplines who had been conducting addiction research in isolation. Debas called together a faculty committee that enthusiastically endorsed the idea in 1997.

"Addiction as a disease has been obscured by the moral and philosophical labels that society has attached to the behaviors of people addicted to drugs of abuse," Debas said. "The creation of the UCSF Center for the Neurobiology of Addiction will be instrumental in changing the national dialogue about addiction because, you see, we are now able to demonstrate that it is a disease of the brain.

"In this new research center, we have brought together superb basic scientists whose work, while diverse, all focuses on understanding the basic neurobiological mechanisms of addiction. Once you gain an understanding of these underlying mechanisms, then the dream of developing effective treatments becomes a real possibility," Debas added.



David Powers

The center's initial funding was made possible through the efforts of Henry H. Wheeler Jr., president of the Park Water Co. Inc. in Downey, Ca., and his wife, Maxyne.

The center expects to award roughly five to ten grants each year to individual investigators, Malenka said. It will support unique projects for which traditional funding is not readily available, especially projects by young investigators interested in entering the field. In order to excel in addiction research, the center is seeking to establish a permanent endowment fund to support faculty recruitments and increased research in addition to the founding support from Wheeler and Park Water Co.

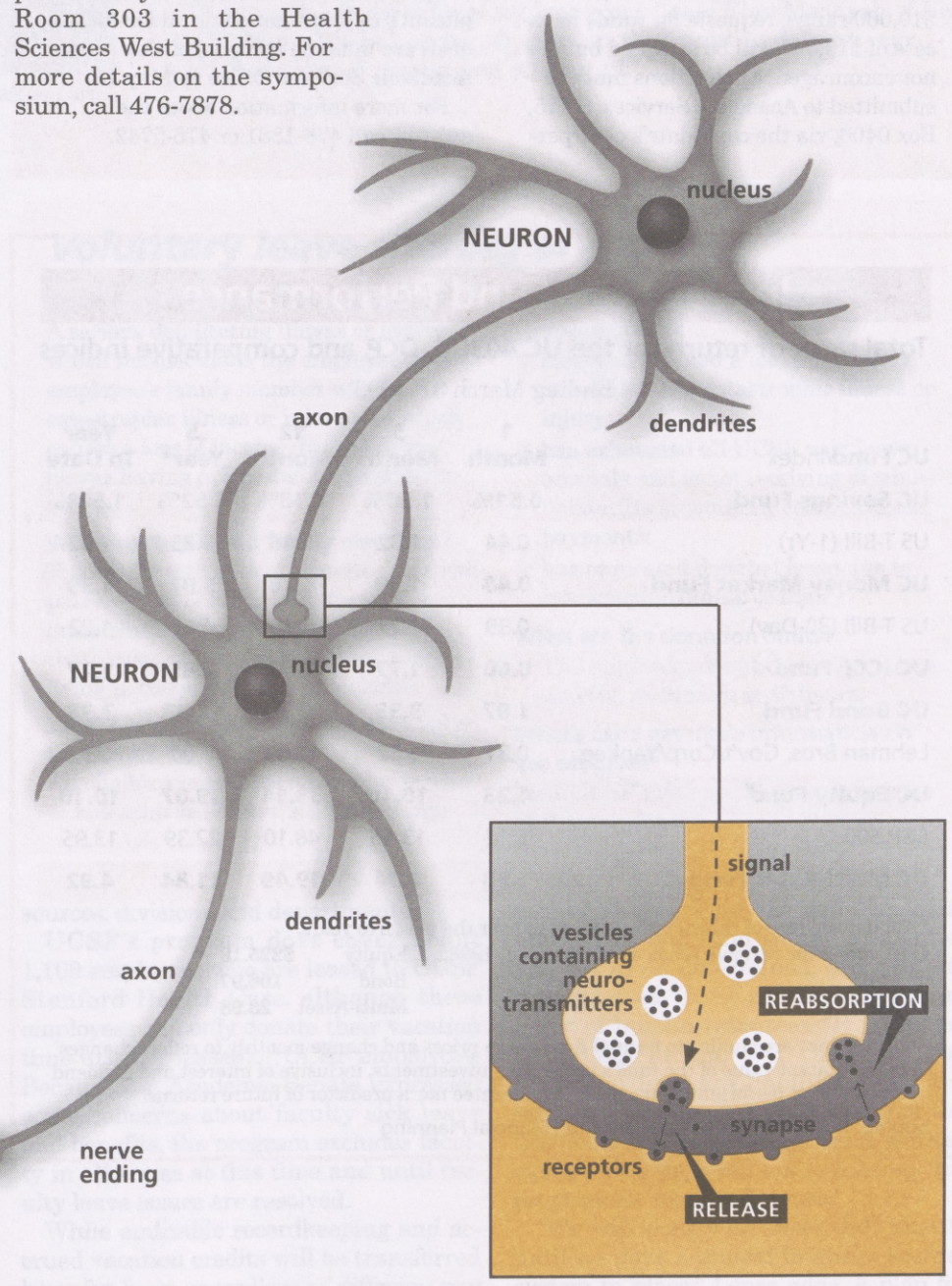
The center will be officially launched in a symposium that begins at 3 p.m. on May 7 with introductions and an overview of the center by Chancellor Debas and Zach Hall. Alan Leshner, director of NIDA, will deliver the keynote speech entitled, "Advances in the Science of Drug Abuse and Addiction: Implications for Prevention, Treatment and Policy."

"This center presents a unique opportunity to bring advances in drug abuse research to bear on the health and social policies that will most effectively curtail the costs and tragic consequences of drug addiction," Leshner said.

Leshner's talk will be followed by two scientific presentations. Thursday's events will be held in Room 300 in the Health Sciences West Building, 513 Parnassus Ave. On Friday, May 8, seven scientists will present their findings in talks scheduled from 9 a.m. to 5:45 p.m. Friday's session will be held in Room 303 in the Health Sciences West Building. For more details on the symposium, call 476-7878.

Addiction defined

- Addiction is a chronic, relapsing brain disorder, not a character flaw.
- Addiction is a chemical process that cannot be separated from the environmental and behavioral influences that help to sustain it.
- Addiction begins when foreign, self-administered drugs of abuse activate the reward centers of the brain.
- Addiction mechanisms at the molecular and cellular levels are not well understood, and studies of such mechanisms can be difficult to initiate.
- Addiction treatment programs could be more successful if more were known about how addiction corrupts learning and memory.
- Addiction research at UCSF differs from the norm because it approaches addiction as a broad scientific question to which many different disciplines can add knowledge and insight.



Brain activity

Electrical impulses are initiated in the dendrites of the neuron and travel down the axon to signal the release of chemical neurotransmitters, which are stored in the nerve endings, into the synapse. The inset shows this release process in greater detail. The neurotransmitters activate receptors that generate electrical and biochemical signals in the receiver cell. The signaling process ends when neurotransmitters are reabsorbed into the nerve terminal.

Drugs of abuse can alter several steps in the normal process of neurotransmission. For example, cocaine blocks the reabsorption of some neurotransmitters, while morphine directly activates certain receptors. These acute effects can lead to permanent changes in the brain.

Researchers find clue to male infertility in budding yeast

By JENNIFER O'BRIEN

Budding yeast in a UCSF lab is yielding possible insight into a key step leading to the creation of human sperm. And the finding, say the UCSF researchers, could ultimately pave the way for an understanding of why human sperm sometimes doesn't fully develop, causing sterility.

In their study, published in the April issue of *Molecular Cell,* the UCSF researchers have identified the molecular steps that are involved in pushing a yeast spore, the equivalent of human sperm, through a critical stage of development. And they have determined that when these steps don't take place development is arrested — permanently.

Intriguingly, this finding may offer insight into the molecular glitch that causes a male infertility syndrome. Men with the infertility syndrome have immature sperm that are developmentally interrupted at the same stage of creation as was observed in defective yeast spores.

"This observation sets out a whole paradigm for exploring the human genetics of infertility in men," says Renee Reijo, a leading researcher on sperm-related infertility in men and a UCSF assistant professor of obstetrics-gynecology and reproductive sciences.

"If nothing else," says lead author Shelley Chu, a graduate student in the laboratory of Ira Herskowitz, professor of biochemistry and biophysics, and co-director of the Program in Human Genetics at UCSF, "this study provides a framework for understanding how sperm progress through this critical stage of development. Until now, we didn't have a clue about the molecular targets responsible for this transition." Chu is in the UCSF Program of Genetics and Cell Biology.

"It is probably the most elegant model for examining the creation of sperm I've seen."

— RENEE REIJO, *UCSF assistant professor*

While yeast, single-celled fungi, are best known for their role in making beer brew and bread rise, their spores, which carry the genes leading to offspring, have a lot in common with sperm.

Both spore and sperm are created from other cells only after undergoing a complex process known as meiosis, in which a cell's DNA replicates and then undergoes two steps of division. Spore and sperm also have unique shapes relative to the cells that created them. In addition, two matured yeast spores can fuse to produce progeny just as sperm and egg fuse to produce offspring.

Spore and sperm are also both susceptible to being blocked in mid-development, just before the cells from which they are produced undergo the first of the two divisions of their DNA. This interruption occurs at a stage of meiosis called pachytene and, in most cases, is temporary and beneficial, serving as a period during which the cell can repair any damage that may have occurred up to that point in development.

At least in human sperm, however, interruption can be permanent, preventing the further development of the cell — and thereby causing sterility, as in testicular maturation arrest.

Junior faculty can get support

The Academic Services office announces that funds will be available for the following two 1998-99 awards programs for junior faculty who may encounter unusual obstacles in developing the substantial records in research and creative work necessary for tenure.

- The Faculty Development Awards support junior faculty, with priority going to those holding tenure-track or in-residence appointments. Award funds may be used for equipment to establish a research lab or to develop a research project, special paid leave or release time to initiate or complete a scholarly effort, or research stipends.

Awards are usually in the $5,000 to $10,000 range; requests for funds in excess of $10,000 will be accepted but are not encouraged. Applications must be submitted to Academic Services, S 115, Box 0400, via the candidate's chairperson and associate dean by May 15.

- The Pre-Tenure Award is intended to serve talented ladder or in-residence junior faculty who are highly promising and show need for support by providing funds for release time during critical periods prior to tenure review. One faculty member will be selected to receive the $22,636 award. Eligible for the award are full-time, junior ladder rank or in residence faculty who encounter unusual obstacles (e.g., devote an extraordinary amount of time teaching/mentoring students or participating in public and university service) in achieving tenure.

Applications and letters from the applicant's department chair and associate dean are must be received at the Academic Services Office by May 15.

For more information about the awards, call 476-1881 or 476-5742.

Investment Fund Performance

Total rates of return for the UC 403(b), DCP, and comparative indices

Ending March 31, 1998

UC Fund/Index	1 Month	3 Month	12 Month	5 Year*	Year To Date
UC Savings Fund	**0.51%**	**1.50%**	**6.18%**	**6.52%**	**1.50%**
US T-Bill (1-Yr)	0.44	1.32	5.48	5.23	1.32
UC Money Market Fund	**0.48**	**1.39**	**5.70**	**5.07**	**1.39**
US T-Bill (30-Day)	0.39	1.22	5.20	4.67	1.22
UC ICCF Fund	**0.60**	**1.77**	**7.56**	**7.85**	**1.77**
UC Bond Fund	**1.07**	**3.35**	**27.22**	**12.83**	**3.35**
Lehman Bros. Gov't/Corp/Yankee	0.31	1.52	12.39	7.00	1.52
UC Equity Fund	**4.23**	**10.10**	**33.14**	**19.07**	**10.10**
S&P 500	5.12	13.95	48.10	22.39	13.95
UC Multi-Asset Fund	**1.98**	**4.94**	**19.49**	**11.84**	**4.92**

*Annualized rate of return reflects average over the past five years.

Unit values for variable funds as of March 31, 1998: Equity **$225.19**; Bond **106.97**; Multi-Asset **23.98**

Unit values are similar to mutual fund share prices and change monthly to reflect changes in the market value of the fund's underlying investments, inclusive of interest and dividend income. Past performance is neither a guarantee nor a predictor of future returns.

Source: Jerry Neal, UCSF Benefits and Financial Planning

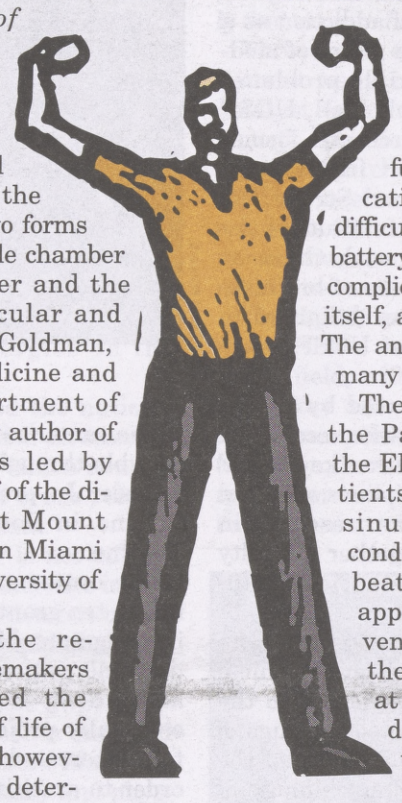
Study looks at quality of life with pacemakers

By JENNIFER O'BRIEN

Implanted cardiac pacemakers have been used to treat people with slow heart rates for more than two decades. But until recently there had never been a comprehensive evaluation made of the quality of life associated with the two different forms of the therapy.

As a result, discretion on which to use has been left to individual institutions or physicians.

Now, in the April 16 issue of *The New England Journal of Medicine,* researchers representing 10 different institutions report the results of a large-scale, multi-institutional clinical trial assessing the relative merits of the two forms of treatment — the single chamber (ventricular) pacemaker and the dual chamber (ventricular and atrial) pacemaker. Lee Goldman, UCSF professor of medicine and chairman of the department of medicine, was the senior author of the study, which was led by Gervasio A. Lamas, chief of the division of cardiology at Mount Sinai Medical Center in Miami Beach, Fla., and the University of Miami.



Not surprisingly, the researchers say, both pacemakers dramatically improved the health-related quality of life of patients. Unexpectedly, however, the researchers also determined that the slightly higher quality of life traditionally associated with dual chamber pacing was detectable only in a group of patients with a heart condition known as sinus node dysfunction.

Goldman

"Our study shows that both types of pacemaker make people feel much better," says Goldman. "And, when there are quality of life benefits from the more complicated dual chamber pacemakers, they are seen only in people with sinus node dysfunction. And even there, the degree of improvement is considerably more modest than we had expected."

In the study, 407 patients aged 65 and older and 60 percent male, were assessed for health-related quality of life, as measured by social function, physical ability, emotional mental health and energy, cardiac functional status, and long-term cardiac function.

The researchers did see better long-term cardiac functional status in patients with dual chamber pacemakers, but this observation, they say, demonstrates the complexities inherent in measuring quality of life in the elderly. "While it is clear from our results that dual chamber pacing is associated with long-term improvements in cardiovascular function over time," said Goldman, "aging and the development or worsening of other diseases may overwhelm the modest improvements in cardiovascular functional class and minimize the long-term effect on generic quality of life."

The pacemakers have traditionally been associated with different advantages. The single chamber ventricular pacemaker is less expensive, easier to implant, and has a longer service life than the dual chamber pacemaker; most important, there often are fewer complications associated with the pacemaker itself.

Dual chamber pacemakers, on the other hand, offer the theoretical benefit of mimicking the normal electrical sequence of the heart, pacing the atrium first and the ventricular chamber second.

"The question," said Goldman, "has been whether the benefit of the dual chamber pacemaker in terms of heart function and other complications warrants the extra difficulty in placement, shorter battery life and potential risk of complications for the pacemaker itself, as well as the extra cost. The answer seems to be that in many cases it is not."

The 29-center study, called the Pacemaker Selection in the Elderly Trial, involved patients diagnosed with either sinus node dysfunction, a condition in which the heart beat is not initiated at the appropriate rate, or atrial-ventricular block, in which the heart beat is initiated at the appropriate rate but does not make it through the electrical system. Patients were assessed at three, nine and 18 months after enrollment in the study.

AIDS pilot study funds available

HIV/AIDS pilot study research funds are available from the UCSF AIDS Clinical Research Center (ACRC) a component of the UCSF AIDS Research Institute (ARI.) The deadline for the next funding cycle is Monday, June 1.

Other application deadlines are set for Oct. 1 and March 1, 1999.

Applicants can submit studies in basic science, epidemiology, behavioral science as well as clinical trials. Predoctoral students involved in AIDS research with faculty mentors are also eligible to apply. For more information and applications, contact Layne Ethington by phone at 476-8857 or by email at stom%layne@cc-mail.ucsf.edu.

In other news, the ACRC is seeking faculty members who would like to be included in its database of peer reviewers for the Pilot Study Program. Peer reviewers confidentially fill out a one-page form briefly addressing six categories about the merits of a proposed pilot research project (generally 10 to 15 pages) that is within their field of expertise. Each proposal is reviewed by several reviewers and is finally ranked for funding by the Dean's AIDS Advisory Committee to the ACRC. For more information about the Pilot Study Program, contact Ethington as noted above.

Photos by Chris T. Anderson

Holding the first-place trophy, is the School of Dentistry winning team, from left, Dawud Muhaimin, Rameek McNair, Tonya Machnick, Virginia Luk and Karen Lin.

Student Abby Kohn, center, directs her blindfolded Graduate Division teammates through a pool of whipped cream and popcorn to find their instruments.

Photos by Chris T. Anderson

Professor Daniel Lowenstein and first-year student Brande Waite rush to put on their designer scrubs as part of the School of Medicine team.

Competitive spirit soars during midday madness

Give the students the first decent, warm spring day of the year and they go mad.

Last week's "Midday Madness" — planned by UCSF's perfect weather prognosticators (actually EMPACT!, the Associated Students, and the Graduate Students' Association) — pitted teams from UCSF's four schools and the Graduate Division against each other in a whacked-out-only-in-a-health-professionals-schools-Olympics.

Showing their true competitive nature, students and faculty dug lab supplies and instruments out of a pool of popcorn and whipped cream, hopped on a mini-waterslide, donned designer scrubs, and formed a human pyramid. And that was just part of the relay race. In a fun and refreshing hour, people on Parnassus — at least in Saunders Court — acted like this was some kind of college campus.

In the end, the School of Dentistry copped the first place gold crown (pun intended), followed by Pharmacy, Nursing and Medicine.

"It was great to see a large student group," said Elan Masliyah of EMPACT! "I'm already hearing about what they want to do next year — a tub full of oatmeal or jello, and other stuff."

Leave (from page 1)

sources department, says he may need extra paid leave if he uses up all his while caring for his father, who has suffered a stroke. But even if he's not a beneficiary he says he's glad the University is making available this "wonderful opportunity."

The program is designed to be confidential, both to protect the privacy of employees and to prevent the semblance of peer pressure or coercion to participate in the program. Obviously, those responsible for administering the program will know both donors and recipients.

An employee may waive their right to privacy in order to get the word out about their need for catastrophic leave. Such appeals may be made via email or flyers or by telling their supervisor to announce it at a staff meeting, for example.

Donors, who are expected to remain anonymous, can then specify on a donation form to whom they want to give their vacation time. UCSF does not have a leave bank; donations must be given to a specific individual.

"If there is an outpouring of leave donated for a particular individual, only what is needed will be used," Baker adds.

An employee who receives donated time can go on and off pay status as the donations are processed through the payroll office. The total time an employee may remain off work on donated leave is six continuous or non-continuous months within a 12-month period.

A show of support

"I do think we have a very good plan," says David Bell, chair-elect for the UCSF Staff Council. "We have gone over it with a fine-toothed comb." As senior delegate to systemwide Council of UC Staff Assemblies, Bell has worked for its implementation at UCSF. He was part of a group that also included Baker, Barry Lee Brighton, assistant director for business affairs, development office, Glenda Freberg, principal analyst in the accounting department, Kathy Judd, administrator of pulmonary and critical care medicine at SFGH and Jeanne Lowe, principal administrative analyst in academic personnel.

Demand for leave sharing at UCSF is expected to be moderate, but the need has certainly been vocalized on campus as far back as the mid-1980s.

"I think the AIDS crisis prompted the initial push for the program," said Bell, who has witnessed the toll the AIDS epidemic has taken on employees.

"I am proud of the fact that Staff Council pushed for it and really carried it to this campus, although we don't deserve all the credit," Bell says.

Indeed, as a way to enhance "team spirit" and create a supportive workplace environment, UC President Richard Atkinson last June authorized the campuses to establish a leave sharing program that is fair and equitable to all employees. One of his guidelines for implementing such a program is that it be offered to all eligible staff and academic personnel across all campus-based fund sources, divisions and departments.

UCSF's program does cover about 1,100 employees who are leased to UCSF Stanford Health Care, although these employees can only donate their vacation time to other leased or UCSF employees. Because the Academic Senate expressed some concerns about faculty sick leave and benefits, the program excludes faculty in all series at this time and until faculty leave issues are resolved.

While auditable recordkeeping and accrued vacation credits will be transferred hour for hour, regardless of differing pay scales or fund source, the issue of how the cost of transferring vacation accruals will be shared from one department to another or one fund source to another has yet to be determined, according to Randy Lopez, UCSF assistant vice chancellor of human resources. "It is the expectation of the UC Office of the President to share liability across the campus," he says. "We recognize that the financial issues have not been worked out yet. But we opted not to hold up this program for marginal issues."

"We will work with cases individually until we have a central financial accrual system in place," Lopez adds. A plan for such a campuswide system is expected to be in place by this summer.

Voluntary leave sharing at a glance

What is catastrophic illness or injury?
A serious debilitating illness or injury which incapacitates the employee or an employee's family member who has a catastrophic illness or injury and which causes a loss of income due to the employee having exhausted all paid leave accruals.

Who are considered family members?
The employee's spouse, domestic partner, parent, child, sibling, grandparent or grandchild, in-laws, step-relatives in these relationships or any other person living in the employee's household.

Who is eligible to receive donated vacation time?
An eligible recipient is an employee who:

- has achieved career status and completed a probationary period, if one was required;
- has been granted a leave of absence in relation to a catastrophic illness or injury;
- has exhausted all UCSF paid leave accruals and is not receiving disability benefits or workers' compensation payments;
- has requested donated leave due to catastrophic illness or injury.

What are the donation limits?

- The minimum donation is eight hours and the maximum is 40 hours.

Where can I get more information on the program?
Visit UCSF's Human Resources website at www.ucsfhr.edu

April 25–May 8, 1998

25 Saturday

SELF-DEFENSE FOR WOMEN: The Rape Prevention Education Program presents *Self-Defense for Women: Level II,* 1:30-5:30 p.m., MU Fitness Center. This class reviews material covered in Level I and introduces intermediate practice of blocks, counter strikes, and releases from pins and chokes on the ground. Anyone who has attended a Level I training or who has obtained permission of instructor Nina Haft may attend. Cost $25/UCSF affiliates and seniors; $50/general public. Pre-registration is required. Call 476-5222.

DANCE WORKSHOP: Learn the salsa, 5-7 p.m. Open to all levels. For more information, call Millberry Programs & Services at 476-1115 or 476-0350.

27 Monday

OUTCOMES RESEARCH SEMINAR: Patricia Katz, Institute of Health Policy Studies, presents *Health Care Quality and Outcomes: Research and Application,* noon-1:30 p.m., 1388 Sutter St., 11th Floor, Seminar Room. Speaker Arnold Millstein will discuss consumers/purchasers. To RSVP, call Ernestine Florence at 476-4924 or email ernestine_florence@quickmail.ucsf.edu.

FOR YOUR EYES ONLY: Richard Abbott, assistant clinical professor, ophthalmology, presents *Better Vision Now,* 6 p.m., Beckman Vision Center, 8 Kirkham. Learn new surgery options for the correction of nearsightedness and astigmatism, from laser surgery to corneal implants. Free. Call 476-5021.

29 Wednesday

PHARMACY POSTER SESSION: Pharmacy residents exhibit posters for annual display, 11 a.m.-1 p.m., MU Conference Center.

DOMESTIC VIOLENCE TALK: John Fazio, director, SFGH emergency department, presents *Domestic Violence, Assessment and Treatment,* noon-1 p.m., N 729. Sponsored by the UCSF Nursing Student Council.

BROWN BAG LECTURE: Saul E. Rosenberg, associate clinical professor, psychiatry and psychologist, presents *Overcoming Writer's Block,* 12:10-1 p.m., HSW 300. Learn how to stop procrastinating. Sponsored by Public Service Programs. Call 476-4394.

30 Thursday

NEW EMPLOYEE ORIENTATION: 8:30-10:30 a.m., U 70. Call Leonard Florendo, Human Resources, at 476-1073 to schedule.

ABOG FORUM: 8:30 a.m.-4:30 p.m., Laurel Heights Auditorium. Day features keynote speaker Zach Hall, vice chancellor for research. Call 476-8320

BREAST CANCER FORUM: See page 1 for details.

ENRICHMENT SERIES: Michael Alvarez, UCSF career center, presents *Resume Writing Workshop,* noon, HSW 301. This workshop will cover tips on how to define your background, skills and objectives in a creative and concise manner. Sponsored by the Office of Student Relations. For more information, call Maureen Conway at 502-2442.

MEDICAL GRAND ROUNDS: George A. Beller, vice chairman, department of medicine and chief, cardiovascular division, University of Virginia Health Sciences Center, Charlottesville, Virginia, presents *Added Prognostic Value of Stress Myocardial Perfusion Imaging in Coronary Disease,* noon-1 p.m., N 225. Sponsored by the Department of Medicine.

COLE HALL CINEMA: *Deconstructing Harry,* 5:45 and 7:45 p.m., Cole Hall Cinema. Cost is $2-3.50. Call 476-6932 or check the website at http://artsperf.ucsf.edu.

MAY

1 Friday

ENERGY & HEALING: Michael Mayer presents *Energy Medicine: East & West,* noon, HSW 300. Experience qigong (an ancient method for cultivating vital life energy), along with a slide show and lecture about the history of energy healing. Sponsored by the Institute of Healing Arts & Sciences. Free. Call 584-4416.

COLE HALL CINEMA: *Deconstructing Harry.* See April 30 listing. Showtimes are 6:30 and 8:30 p.m.

2 Saturday

WORKSHOP FOR SENIORS: The UCSF/Mount Zion Center on Aging Community Health Education series presents *Healthy Hearts,* Laurel Heights Conference Center. The workshop is free, but pre-registration is required as seating is limited. Call 750-5342.

INFERTILITY FORUM: Postponed

3 Sunday

HEALTH FAIR: UCSF health care professionals and students participate in dental screenings, diabetes testing, pediatric consultations and more at health fair, 11 a.m.-6 p.m., Civic Center Plaza, San Francisco. Sponsored by the Mission Economic and Cultural Association with UCSF coordination provided by UCSF Public Service Programs.

4 Monday

A TALK WITH MANKILLER: Wilma Mankiller, a captivating storyteller and astute observer of the American political scene will speak, noon-1 p.m., Cole Hall. For more information, call Amy Levine, UCSF Women's Resource Center, at 476-4837.

HEALTH POLICY SEMINAR: Ricky Bluthenthal, associate specialist and Alex Kral, biostatistician, urban health sciences, Institute for Health Policy Studies (IHPS), present *The HIV Epidemic and Syringe Exchange Programs: Legal, Public Health, and Drug Use Issues,* noon-1:30 p.m., IHPS Seminar Room, 1388 Sutter St., 11th Flr. Sponsored by IHPS and the Institute for Health & Aging.

5 Tuesday

CINCO DE MAYO

6 Wednesday

JEWELRY SALE: A benefit sale of fine jewelry will be held 9 a.m.-5 p.m., MedSci Lobby. Hi-Ho Silver, designers from Taxco, Mexico and Silver Mind, unique Roman and Greek coin designs, will be featured. Checks, Visa and MasterCards accepted. This is a semi-annual event for patients of UCSF Stanford Health Care. Sponsored by the Hospitals Auxiliary of the Medical Center.

BROWN BAG LECTURE: Fernando Quintero, director, Newswatch Project, presents *Media Images of Mexican-Americans and Other Latinos,* 12:10-1 p.m., HSW 300. Quintero will discuss how images in the media perpetuate stereotypes and misrepresent the Latino community. Sponsored by Public Service Programs. Call 476-4394.

7 Thursday

ADDICTION CENTER INAUGURAL FORUM: See pages 4 and 5.

CAREER AND RESEARCH DAY: The Graduate Students' Association and the UCSF Career Center present *The Power of Preparation.* For more information, call 476-2233.

UPCOMING EVENTS

Lessons from TB and HIV

The UCSF Center for AIDS Research will host a nursing school seminar titled *Adherence in the Homeless: Lessons from TB and HIV* on Monday, May 4, from 3 to 6 p.m., in room N 217.

Speakers include Marjorie Robertson, associate research psychologist, David Bangsberg, assistant adjunct professor of medicine and Jackie Tulksy, assistant clinical professor of medicine, both of San Francisco General Hospital.

Those who want to attend should respond to Thuan Duong at 502-8081.

Gospel choir to sing

The campus community is invited to attend the UCSF Gospel Choir's performance, *Reign on Us,* with guest choirs Eugene Cole and Persuade, and the Peace Gospel Choir. The performance will be held on Saturday, May 16, at 7 p.m. in the Neighborhood Baptist Church, 608 Hayes St., San Francisco. For more information, call 476-6932.

UCSF Orchestra to perform benefit concert

The UCSF Orchestra, featuring mezzo soprano Erin Neff singing *Eight Poems of Emily Dickinson,* will perform on Saturday, May 9, at 8 p.m. in the Calvary Presbyterian Church, 2515 Fillmore St. This is a benefit concert for the Landberg Center for Health and Ministry. Tickets will be sold at the door. Admission cost is $8 for UCSF students and $15 for the public. For more information, call 476-6932.

Erin Neff

Breast cancer (from page 1)

Research (PAIR) and director of the Clinical Trials Information Project (CTIP) and Advocacy Core, will discuss the role of patients in improving treatment outcomes.

Programs that foster shared decision-making among physicians and breast cancer patients lead to better patient satisfaction and lower health care costs, according to Mulley. Mulley will discuss shared-decision-making programs to support clinicians and breast cancer patients in their decision-making roles.

Collyar will discuss breast cancer patients' perspectives on the decision-making process. Collyar is a two-time breast cancer survivor herself, and through her patient advocacy programs, aims to "bring the voices of breast cancer patients into the research dialogue."

■ Larry Norton, chief of the Breast Cancer Medicine Service at Memorial Sloan-Kettering Cancer Center, will explain how researchers are trying to make the best use of genetic information in improving the lives of cancer patients, by learning to interpret the genetic fingerprints of tumors, the quality of which is improving exponentially with recent advances in laboratory technology and techniques.

■ Jeffery Struewing of the NCI's Division of Cancer Epidemiology and Genetics aims to determine just how cancerous "cancer genes" really are. In his presentation, Struewing will describe creative scientific approaches he is using to find more accurate answers to questions of genetic cancer risk.

Struewing and his NCI colleagues published findings in the May 15, 1997 issue of the New England Journal of Medicine suggesting that mutations in the breast cancer genes BRCA1 and BRCA2 are somewhat less deadly than originally reported. Struewing is now studying BRCA defects in Iceland, where population characteristics offer unique advantages to genetics researchers.

Long known as a major center for basic cancer research, UCSF is working to enhance clinical research by arranging to provide access to both clinical care and trials under one roof. Construction of a new building to house the clinical cancer programs of UCSF/Mount Zion Medical Center, part of UCSF Stanford Health Care, is scheduled to break ground this year. In addition, UCSF opened its new cancer research building in 1997 and is continuing to recruit nationally recognized researchers to the facility.

COLE HALL CINEMA: *Jackie Brown,* 5:45 and 8:45 p.m., Cole Hall Cinema. Cost is $2-3.50. Call 476-6932 or check the website at http://artsperf.ucsf.edu.

8 Friday

MAMMOGRAPHY VAN: 9 a.m.-3 p.m., Parnassus. Call 476-2193 for appointment

FORUM ON ADDICTION: See pages 4 and 5.

JOB FAIR: 10 a.m.-4 p.m., MU Gymnasium. Meet representatives from Bay Area companies and organizations. Sponsored by the Office of Student Relations. Call 502-2442.

WELLNESS LECTURE: Swami Sita of the Sivananda Yoga Center in San Francisco, presents *The Healing Power of Yoga,* noon, HSW 300. Learn how the combined method of the four classical paths of Yoga liberate the spirit, balance the mind, and strengthen the body. Sponsored by the Institute of Healing Arts & Sciences. Free. Call 584-4416.

COLE HALL CINEMA: *Jackie Brown.* See May 8 listing. Showtimes are 6:30 and 9:15 p.m.